1. A method for forming an electrical conductor with a plurality of electromigration-inhibiting/electrically conductive plugs disposed between electrically conductive segments of the electrical conductor, comprising the steps of:

forming a row of aligned windows in a planar surface;

depositing an electromigration-inhibiting/electrically conductive material over the planar surface and through the windows to fill the windows and thereby provide, in such windows, plugs of electromigration-inhibiting/electrically conductive material;

removing portions of the electromigration-inhibiting/electrically conductive material to form the plugs with surfaces co-planar with a surface surrounding the plugs.

2. The method recited in claim 1, wherein the distance between the windows is equal to or less than a predetermined critical length, L_c, selected to inhibit electromigration.

3. The method recited in claim 2, wherein the conductor has a length, L, and wherein the number of windows is equal to or more than $(L/L_c)-1$.

4. The method recited in claim 1 wherein the planar surface includes an electrically conductive film and wherein the electromigration-inhibiting/electrically conductive material is deposited over the conductive film and into the windows formed therein to provide, in such windows, the plugs;

wherein, subsequently, portions of the deposited material are removed to form the plugs with surfaces co-planar with a surface surrounding the plugs; and

wherein the electrically conductive film is patterned to form the electrically conductive segments connecting the plugs.

5. The method recited in claim 4, wherein the electrically conductive film is a multi-layer structure including one or more layers of electromigration-inhibiting refractory materials.

6. The method recited in claim 1 wherein the planar surface includes a dielectric layer; and

wherein the electromigration-inhibiting/electrically conductive material is deposited over the dielectric layer and into the windows formed therein to provide the plugs; and

removing portions of the deposited electromigration-inhibiting/electrically conductive material to form the plugs with a surface co-planar with exposed surface portions of the dielectric layer surrounding the plugs.

7. The method recited in claim 6 including the steps of:

forming trenches in the surface portions of the dielectric film abutting and aligned with, the plugs;

depositing an electrically conductive material deposited over the dielectric layer and into the trenches;

subsequently removing portions of the deposited electrically conductive material from the dielectric layer to form, in each one of the trenches, corresponding electrically conductive segments with surfaces thereof co-

planar with each other, with the surface of the plugs, and with surfaces of the dielectric layer, and connecting the plugs.

8. The method recited in claim 7 wherein the electromigration-inhibiting refractory metal liner and electrically conductive material are deposited successively into the trenches.

9. The method recited in claim 1 wherein the planar surface includes a dielectric layer having an electrical conductor disposed therein;

wherein the windows are formed in the electrical conductor thereby separating the electrical conductor into plurality of electrically conductive segments;

wherein the electromigration-inhibiting/electrically conductive material is deposited over the dielectric layer, over the electrical conductor and into the windows to provide, in such windows, the plugs;

wherein portions of the deposited electromigration-inhibiting/electrically conductive material are removed to form the plugs with surfaces co-planar with a surface of the dielectric layer and with surfaces of the electrically conductive segments.

10. The method recited in claim 1 wherein an electromigration-inhibiting/electrically conducting liner and an electrically conducting material are deposited successively into the windows.

11. The method recited in claim 4 wherein an electromigration-inhibiting/electrically conducting liner

and an electrically conducting material are deposited successively into the windows.

12. The method recited in claim 6 wherein an electromigration-inhibiting/electrically conducting liner and an electrically conducting material are deposited successively into the windows.

13. The method recited in claim 9, wherein an electromigration-inhibiting/electrically conducting liner and an electrically conducting material are deposited successively into the windows.

14. A method comprising the steps of:

forming a plurality of rows of aligned windows in the planar surface;

filling the windows with electromigration-inhibiting/electrically conducting material to form a plurality of the plugs in the windows, a portion of such material extending beyond the planar surface;

removing the portion of the said material extending beyond the planar surface to form the plugs with electrically conductive segments electrically interconnected through the plugs.

15. A method for forming a multiconductor metallization system with a distance between conductors less than one micron comprising the steps of:

forming a plurality of equidistant rows of aligned windows in the planar surface;

filling the windows with electromigration-inhibiting/electrically conducting material to form a

plurality of the plugs in the windows, a portion of such material extending beyond the planar surface;

removing the portion of the said material extending beyond the planar surface to form the plugs with surfaces co-planar with surfaces surrounding the plugs;

forming electrically conductive segments within the same planar surface, abutting and electrically interconnecting the plugs.

16. The method recited in claim 15, wherein the planar surface includes a dielectric layer having an electrical conductor disposed therein, and where the electrical conducted segments are formed simultaneously with the windows.

17. A multilevel metallization system, comprising:

a first metallization level of such system comprising: first electrical conductors having each a plurality of first electromigration-inhibiting/electrically conducting plugs therein, the first plugs having co-planar surfaces, the first electrical conductors comprising each a plurality of first electrically conductive segments electrically interconnected through the first plugs, the first electrically conductive segments being co-planar with each other and the first plugs;

electrically conductive vias passing through apertures in a dielectric layer disposed on the first metallization system to electrically interconnect the first metallization level and a second metallization level;

such second metallization system comprising:

electrical conductors having each a plurality of second electrically conductive segments electrically interconnected through a plurality of second

electromigration-inhibiting/electrically conducting plugs, the second electrically conductive segments and the second plugs being co-planar.

18. A method of forming a multilevel metallization system, comprising:

forming a first metallization level of such system comprising: first electrical conductors having each a plurality of first electromigration-inhibiting/electrically conducting plugs therein, the first plugs having co-planar surfaces, the first electrical conductors comprising each a plurality of first electrically conductive segments electrically interconnected through the first plugs, the first electrically conductive segments being co-planar with each other and the first plugs;

forming electrically conductive vias passing through apertures in a dielectric layer disposed on the first metallization system to electrically interconnect the first metallization level and a second metallization level;

forming such second metallization system comprising:

forming electrical conductors having each a plurality of second electrically conductive segments electrically interconnected through a plurality of second electromigration-inhibiting/electrically conducting plugs, the second electrically conductive segments and the second plugs being co-planar.

19. An electrical conductor, comprising:

a plurality of electrically conductive segments,

a plurality of electromigration-inhibiting/electrically conductive plugs disposed between the segments;

the electrical conductor has a length, L, the number of such plugs being equal to or more than $(L/L_c)-1$, where L_c is a predetermined critical length selected to inhibit electromigration.

20. The electrical conductor recited in claim 19, wherein $(R-R_o)/R_o$ is less than 0.01, where R is the resistance of the electrical conductor and R_o is the resistance of an electrical conductor of equal length and made of the same material as the electrically conductive segments without the plugs.

21. An electrical conductor comprising:

a plurality of electrically conductive segments;

a plurality of electromigration-inhibiting/electrically conductive plugs disposed between the segments;

such plugs comprising:

an electromigration-inhibiting/electrically conductive liner; and,

an electrically conductive material.